

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 26

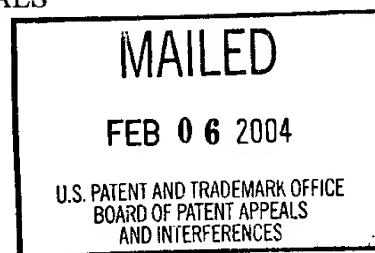
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* HARALD NEUMANN

Appeal No. 2003-1994  
Application 09/369,767

ON BRIEF



Before WARREN, WALTZ and DELMENDO, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

*REMAND TO THE EXAMINER*

We remand the application to the examiner and to appellant for consideration and explanation of issues raised by the record. 37 CFR §§ 1.196(a) and 1.196(d) (2003); Manual of Patent Examining Procedure (MPEP) §§ 1211 and 1212 (8th ed., Rev. 1, Feb 2003).

Claim 1 is illustrative of the claims on appeal:

1. An electrochemical sensor comprising:

a solid electrolyte element including at least one first electrode, at least one second electrode and at least one heating element, the at least one second electrode being situated closer than the at least one first electrode to the at least one heating element, the at least one second electrode being coupled to ground, the at least one first electrode coacting with the at least one second electrode and being negatively polarized.

According to appellant, this arrangement blocks the coupling of the heater voltage and the probe voltage (specification, page 1).

The examiner applied, *inter alia*, Kato et al. (Kato) and Stahl et al. (Stahl) as primary references in the grounds of rejection of the appealed claims under 35 U.S.C. § 103(a).

The first issue raised by the record is the interpretation to be made of certain claim language. In order to apply the prior art to appealed claim 1, the language thereof must first be interpreted in light of the written description in the specification as interpreted by one of ordinary skill in this art. *See, e.g., In re Thrift*, 298 F.3d 1357, 1364, 63 USPQ2d 2002, 2006 (Fed. Cir. 2002); *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997), *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989). The plain language of appealed independent claim 1 specifies that the second electrode must be “coupled to ground;” that the first and second electrodes must be “coacting;” and that the first electrode must be “negatively polarized.” The issue is whether this claim language involves structural (wiring) limitations, that is, the first electrode would be negative regardless of operating conditions, or does this claim language involve process limitations or convey a method or intended use concept, that is, the first electrode would be negative only under certain operating conditions. We note that the examiner and appellant make arguments based on process, method and intended use conditions with respect to relative oxygen concentration at respective electrodes in addressing the grounds of rejection. It is well settled that process, method and intended use limitations are not limitations that serve to patentably distinguish the claimed invention over the prior art. *See, e.g., In re Yanish*, 477 F.2d 958, 959, 177 USPQ 705, 706 (CCPA 1973); *In re Casey*, 370 F.2d 576, 579-80, 152 USPQ 235, 237-39 (CCPA 1967); *In re Otto*, 312 F.2d 937, 939-40, 136 USPQ 458, 459-60 (CCPA 1963).

Accordingly, we remand this application to the examiner and appellant to address the issue of the interpretation to be made of the quoted claim language.

The second issue involves the interpretation that one of ordinary skill in this art would have made of **FIG. 7** of Kato, relied on without explanation by the examiner (answer, e.g., page 3). We observe that the wiring of the chemical sensor in Kato **FIG. 7** is indeed different than in any of the other figures of the reference, since the circuit comprises conductor path **46** connected to low-potential portion **38b** of heating element **30** to the lead from “reference” electrode **24**, and *not* to the lead from “measuring” electrode **22**, as in the rest of the disclosure of the reference.

Compare Kato **FIGs. 1-6** with **FIG. 7**. According to Kato, the purpose of the circuit comprising conductor path **46** connected to low-potential portion **38b** of heating element **30** to the lead from “measuring” electrode **22**, is to establish a leak current between the high-potential portion of the heating element, that is, high-potential portion **38a** of heating element **30** to “measuring” electrode **22**, in order to provide an oxygen pump that will supply oxygen to an area to facilitate “reference” electrode **24** (e.g., col. 2, line 67, to col. 3, line 10; col. 3, lines 36-43; col. 4, lines 1-22 and 39-42; col. 6, lines 27-52; col. 6, line 67, to col. 8, line 13; col. 8, lines 57-60; col. 9, lines 34-51 and 59-66; and col. 10, lines 9-10 and 22-30). We find no disclosure in Kato which explains the wiring in Kato **FIG. 7** and indeed, the disclosure suggests that the wiring of this figure should be the same as Kato **FIGs. 1** and **6** (e.g., col. 5, lines 31-33, and col. 10, lines 19-21). Thus, on the record as it now stands, it reasonably appears that one of ordinary skill in this art would have found the wiring of the electrochemical sensor in Kato **FIG. 7** to be error because it does not appear to establish an oxygen pump according to the teachings of the remainder of the written description, including the figures, of the reference, and thus would not have been placed in possession of the structure of **FIG. 7**. Cf. *In re Yale*, 434 F.2d 666, 668-69, 168 USPQ 46, 48-49 (CCPA 1970) (listing of a compound in reference would have been apparent typographical error to one of ordinary skill in the art, and thus would not have described or suggested the compound to that person so as to place it within his/her possession).

Accordingly, we remand this application to the examiner and appellant to address the issue of the interpretation to be made of Kato **FIG. 7** in the context of the facts and inferences that one of ordinary skill in this art would have found with respect thereto in the written description, including figures, of Kato.<sup>1</sup>

The third issue involves the interpretation to be made of **FIGs. 4** and **5** of Stahl, relied on by the examiner (answer, e.g., pages 6-7). The “measuring or sensing” electrode **29** of Stahl **FIG. 4** essentially combines “measuring” electrode **15** and “protective” or “shielding” electrode

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<sup>1</sup> It is well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, see *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968), presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

18 shown in Stahl **FIG. 3**, wherein like “protective” electrode 18, “measuring” electrode 29 is “connected to the return line of the resistance heating element 30” (e.g., col. 2, line 65, to col. 3, line 14; col. 3, lines 39-45 and 58-64; col. 4, lines 1-3, 22-26 and 31-39; col. 4, line 65, to col. 5, line 2; col. 5, lines 30-33 and 46-47; col. 6, lines 16-29 and 35-55). The effect of the current in the “shield” circuit formed by combining leads of heating element 30 and combination “measuring” and “shield” electrode 29 (e.g., col. 4, lines 22-24; col. 4, line 65, to col. 5, line 2; and col. 6, lines 21-25) on the polarity of “reference” electrode 27 is not explained on this record, and in this respect, it is not apparent that this circuit forms an “oxygen pump” which can be “not used” in determining that polarity (e.g., brief, page 12; answer, pages 7-8 and 13-14).


Accordingly, we remand this application to the examiner and appellant to address the issue of the interpretation to be made of **FIGs. 4 and 5** of Stahl in the context of the facts and inferences that one of ordinary skill in this art would have found with respect thereto in the written description, including figures, of Stahl.

Therefore, the examiner is required to take appropriate action consistent with current examining practice and procedure with respect to the issues raised above, and to appellant to file a reply brief in response to any supplemental examiner’s answer prepared in response to this remand, *see* 37 CFR § 1.193(b)(1) (2003), with a view toward placing this application in condition for decision on appeal with respect to the issues presented.

We hereby remand this application to the examiner, via the Office of a Director of the Technology Center, for appropriate action in view of the above comments.

This application, by virtue of its “special” status, requires immediate action. *See* MPEP § 708.01(D) (8th ed., Rev. 1, Feb 2003). It is important that the Board of Patent Appeals and Interferences be informed promptly of any action affecting the appeal in this case. *See, e.g.*, MPEP § 1211 (8th ed., Rev. 1, Feb 2003).

*Remanded*

  
CHARLES F. WARREN

Administrative Patent Judge

THOMAS A. WALTZ

Administrative Patent Judge

  
ROMULO H. DELMENDO

Administrative Patent Judge

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